

## **Purchasing a Portable Generator**

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Don't wait until the last minute if you are considering purchasing a portable generator. Buying before demand peaks during hurricane season (June 1 through November 30) is a wise decision. Availability and prices are usually better in the off-season.

### **Before You Buy**

- Before purchasing a generator, determine your family's power needs. Average households need 3000 to 5000 watts to provide enough energy for basic needs (lighting, cooking, refrigeration, pumping water) and cost \$400 to \$700. Decide what appliances you consider necessities and calculate the wattage required. Also calculate the wattage required for additional appliances that are convenient but not vital for day-to-day living. Then, find the right combination of power and price that will fit you family's budget.
- To determine your wattage needs, consult the chart at the end of this article. Keep in mind that these are estimates and may not be the same for all listed appliances. Many appliances have their wattage listed in either the owner's manual or directly on the appliance. Most manufacturers' websites and owner's manuals have additional help in determining wattage usage. Calculate the running watts and the starting watts. Starting watts are the extra power needed to start the appliance and usually at least twice the amount needed to operate an appliance. Add the running and starting watts to get total wattage used when starting the generator. Keep this in mind to keep from overloading your generator. Overloading your generator can cause damage to your generator and appliances.
- Read the owner's manual before starting the generator for the first time. Don't wait until you need the generator before using it. Start your generator each month to help maintain the engine and recharge the battery. If you wait until there is a power failure to use your generator, it may not start or run properly.

### **Operation**

- Use the manufacturer's recommended fuel and oil. Never refuel your generator when it is running. Allow it to cool down before adding fuel. Improper fueling can lead to fire or explosion. Don't store fuel inside the living area of your home

and only store in approved containers. Use a gasoline stabilizer if storing fuel more than a month. Estimate in advance your fuel and oil needs in case of an emergency. Most generators will use about one-half to three-quarters of a gallon of gasoline per hour (12 to 18 gallons a day).

- Start your generator without appliances plugged in. Consult your owner's manual to make sure it is properly grounded. You can plug your appliances directly into the generator or use an outdoor-rated extension cord rated for the watts carried. A surge protected power strip can help protect your appliances from damaging surges. Plug in and turn on your appliances one at a time starting with the most necessary and highest wattage. Let the engine stabilize and make sure your appliance is operating correctly. Add other appliances one at a time, allowing the generator to stabilize as each one is added. Be sure to stay under the wattage rating. Do not operate your generator at maximum wattage for more than 30 minutes.

### **Safety**

- **Never** plug your generator into a household outlet. This is called back feeding. Power that surges through the lines can injure or kill power workers or your neighbors. When power is restored the resulting power could damage your generator. You can hook up your generator directly to house wiring using a professionally installed transfer switch. Use only a licensed electrician to install transfer switches.
- Find a safe, secure, well-ventilated place to operate your generator. Generators give off dangerous carbon monoxide (CO) gas and should never be used inside of your home or attached garage. CO gas cannot be seen or smelled so it is undetectable. Consider purchasing battery-operated CO detectors to place inside your home. Do not place a generator near doors, windows, ventilation intakes or any other place that lets the gas come into your home. Generators should be at least 5 feet from buildings or anything that might catch fire. Protect it from rain by placing under a roof or canopy. Prevent theft by placing the generator out of view. Keep children away from generator. The engine will be hot when running and children could also be shocked or electrocuted.
- Be courteous to your neighbors. Make sure CO fumes from your generator don't enter their home. Remember that generators can be very noisy, so try to place in an area as far away from their home as possible.

Managing generator usage will keep your family provided with power during loss of public service. By using only what you need, when you need it, will keep your costs down and provide longer total use. Use the power you need but don't waste it.

Average Wattage Requirement Guide (Watts = Amps X Volts)		
Appliance or Tool	Running Wattage Requirements	Additional Starting Watts
Coffeemaker	1500	-
Dishwasher, Cool Dry	700	1400
Electric Fry Pan	1300	-
Electric Range Single Element	1500	-
Microwave Oven 1000 watt	1000	-
Refrigerator/Freezer- 18 Cu. Ft.	800	1600
Automatic Washing Machine	1150	2300
Light Bulb	As indicated on bulb	-
Radio	50 to 200	-
Color Television-27"	500	-
Personal Computer with 17" Monitor	800	-
DVD/CD Player	100	-
Window Air Conditioner unit 10,000 BTU	1200	1800
Window Fan	300	600
Electric Water Heater-40 gal.	4000	-
Water Well Pump-1/3 HP	1000	2000

Chart values are estimates only. Consult your owner's manual for actual watts

Chart information from [www.briggsandstratton.com](http://www.briggsandstratton.com)

### References:

[www.hondapowerequipment.com](http://www.hondapowerequipment.com)

[www.briggsandstratton.com](http://www.briggsandstratton.com)

Fact Sheet: Using a Generator When Disaster Strikes, American Red Cross .September 2004.

“Generators Power in a Pinch”, **Consumer Reports**, Consumer's Union, Yonkers, NY, November 2003, pp. 42-44

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Fact Sheet, Lake Co. Extension, 2005.